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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,777	05/09/2007	**Jurgen Meyer**	2209.954(WS2255US-PCT)	2311

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KENNEDY COVINGTON LOBDELL & HICKMAN, LLP
214 N. TRYON STREET
HEARST TOWER, 47TH FLOOR
CHARLOTTE, NC 28202

EXAMINER	
DONDERO, WILLIAM E	

ART UNIT	PAPER NUMBER
3654	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,777	MEYER ET AL.	
	Examiner	Art Unit	
	WILLIAM E. DONDERO	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/17/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the webs in the central region of the drive roller (Claim 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 4 is objected to because of the following informalities: - -an- - should be inserted before "external rotor" in line 2. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 4-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 4 recites the limitation "the rotor housing" in line 3. There is insufficient antecedent basis for this limitation in the claim.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely

exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 5 recites the broad recitation “between 0.1 mm and 0.4 mm” (Line 2), and the claim also recites “preferably 0.2 mm” (Line 3) which is the narrower statement of the range/limitation.

Regarding claim 5, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claim 6, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 7 recites the limitation "the nubs" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the nubs" in line 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5-6 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by Raasch (US-4944463) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Raasch (US-4944463) in view of Kaiser (US-5303570). As claim 1 is an apparatus claim, the limitation "profiled by high-pressure internal forming" is given little or no patentable weight. Therefore Raasch discloses a drive roller 4 for a textile machine producing cross-wound bobbins 1 for the frictional drive of a cross-wound bobbin 1 held so as to rotated in a creel 3 of a winding device characterized in that the outer periphery 13 of the drive roller is formed by a thin-walled, profiled metal tube (Figures 1-2).

If in the alternative, the limitation, "profiled by high-pressure internal forming" is given patentable weight, Kaiser discloses profiling a hollow thin-walled metal tube by high pressure internal forming (Figures 1-11; and see also paragraph [0044] of the instant specification). It would have been obvious to one of ordinary skill in the art at the time of the invention to profile the tube by any method, including the high pressure internal forming as taught by Kasier, to form the profile to guide the yarn as taught by Raasch.

Regarding Claim 3, Raasch discloses the thin-walled profiled metal tube is configured as a coated metal sleeve (Figures 1-2). Regarding Claim 6, Raasch discloses the profiling is stepped at least in the direction of rotation of the drive roller, for example in the form of nubs 12 (Figures 1-2).

With respect to claim 5, Raasch or Raasch in view of Kaiser does not disclose specific values for the wall thickness of the thin-walled, profiled metal tube. However, one of ordinary skill in the art is expected to routinely experiment with the parameters,

especially when the specifics are not disclosed, so as to ascertain the optimum or workable ranges for a particular use. Accordingly, it would have been obvious through routine experimentation and optimization, for one of ordinary skill in the art to make the wall thickness between 0.1 mm and 0.4 mm or 0.2 mm to keep the weight of the sleeve as low as possible.

Regarding Claim 9, Raasch or Raasch in view of Kaiser is silent about the nubs extending uniformly over the entire outer periphery of the thin-walled, profiled metal tube. However, it would have been an obvious design choice to one of ordinary skill in the art at the time of the invention to have the nubs extend over the entire outer periphery of the tube to guide the yarn across the entire traverse process.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raasch (US-4944463) or Raasch (US-4944463) in view of Kaiser (US-5303570) as applied to claims 1, 3, 5-6, and 9 above, and further in view of Clarkson (US-2729051). Raasch or Raasch in view of Kaiser is silent about the thin-walled, profiled metal tube consisting of steel or a high-grade stainless steel alloy. However, Clarkson discloses a textile winding machine drive roller 187 consisting of a high-grade stainless steel alloy (Figures 1-25; and Column 13, Lines 63-66). It would have been obvious to one of ordinary skill in the art at the time of the invention to make the tube of Raasch or Raasch in view of Kaiser from stainless steel as taught by Clarkson to provide a good driving surface and reduce wear as taught by Clarkson (Column 13, Lines 63-66).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raasch (US-4944463) or Raasch (US-4944463) in view of Kaiser (US-5303570) as applied to

claims 1, 3, 5-6, and 9 above, and further in view of Wirz et al. (US-5533686). Raasch or Raasch in view of Kaiser is silent about the drive roller being acted upon by an electric motor single drive in the form of an external rotor on the rotor housing of which the thin-walled, profiled metal tube is fixed. However, Wirz et al. disclose a textile winding machine drive roller 20 drive roller being acted upon by an electric motor single drive 24 in the form of an external rotor on the rotor housing of which the tube of the drive roller is fixed (Figures 1-11; and Column 4, Lines 62-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to drive the tube of Raasch or Raasch in view of Kaiser as taught by Wirz et al. to keep the construction of the roller simple and compact.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raasch (US-4944463) or Raasch (US-4944463) in view of Kaiser (US-5303570) as applied to claims 1, 3, 5-6, and 9 above, and further in view of Pesch et al. (US-3695522). Raasch or Raasch in view of Kaiser are silent about the profiling including webs arranged in the side regions of the drive roller. However, Pesch et al. disclose a tube with profiling including webs 7. It would have been an obvious to one of ordinary skill in the art at the time of the invention to add the webs of Pesch et al. to the tube of Raasch or Raasch in view of Kaiser to help guide the yarn as taught by Pesch et al., and it would have been a further obvious design choice to one of ordinary skill in the art to arrange the webs and nubs in any configuration, including the nubs in the side region and the webs in the central region to achieve the predictable result of guiding the yarn traverse.

Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by Pesch et al. (US-3695522) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pesch et al. (US-3695522) in view of Kaiser (US-5303570). As claim 1 is an apparatus claim, the limitation "profiled by high-pressure internal forming" is given little or no patentable weight. Therefore Pesch et al. discloses a drive roller 1 for a textile machine producing cross-wound bobbins 2 for the frictional drive of a cross-wound bobbin 2 held so as to rotated in a creel of a winding device characterized in that the outer periphery of the drive roller is formed by a thin-walled, profiled metal tube (Figure 2).

If in the alternative, the limitation, "profiled by high-pressure internal forming" is given patentable weight, Kaiser discloses profiling a hollow thin-walled metal tube by high pressure internal forming (Figures 1-11; and see also paragraph [0044] of the instant specification). It would have been obvious to one of ordinary skill in the art at the time of the invention to profile the tube by any method, including the high pressure internal forming as taught by Kasier, to form the profile to guide the yarn as taught by Raasch.

Regarding Claim 6, Pesch et al. discloses the profiling is stepped at least in the direction of rotation of the drive roller, for example in the form of nubs 12 (Figure 2). Regarding Claim 8, Pesch et al. disclose the drive roller has webs 7 in its central region (Figure 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM E. DONDERO whose telephone number is

(571)272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. E. D./
Examiner, Art Unit 3654
/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3654